## **3UILDING STANDARDS COMMISSION**

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February 25, 2019

Eric Govan, Fire Marshal Richmond Fire Prevention Services Division 440 Civic Center Plaza (2<sup>nd</sup> Floor) Richmond, CA 94804

RE: Ordinance #18-16.N.S.

Dear Mr. Govan:

This letter is to advise you of our determination regarding the referenced ordinance with express findings received from your agency on August 8, 2018.

Our review finds the submittal to contain one ordinance modifying provisions of the 2016 California Building Standards Code in Title 24, California Code of Regulations (code), and express findings complying with Health and Safety Code Sections 17958.7 and 18941.5. The code modifications are accepted for filing and are enforceable. This letter attests only to the satisfaction of the cited law for filing of local code amendment supported by an express finding with the California Building Standards Commission (CBSC). CBSC is not authorized by law to evaluate the merit of the code modification or the express finding.

Local modifications to the code are specific to a particular edition of the code. They must be readopted and filed with CBSC in order to remain in effect when the next triennial edition of the code is published.

On a related matter, should your city receive and ratify Fire Protection District ordinances making modifications to the code, be advised that Health and Safety Code Section 13869.7(c) requires such ratified ordinances and express findings to be filed with the Department of Housing and Community Development, Division of Codes and Standards, State Housing Law Program, rather than CBSC. Also, ordinances making modifications to the energy efficiency standards of the code may require approval from the California Energy Commission pursuant to Public Resources Code Section 25402.1(h)(2).

If you have any questions or need any further information, you may contact me at (916) 263-0916.

Sincerely,

Enrique M. Rodriguez

**Associate Construction Analyst** 

cc: CBSC Chron Local Filings 

## Rodriguez, Enrique (CBSC)@DGS

From:

Eric Govan < Eric\_Govan@ci.richmond.ca.us>

Sent:

Wednesday, August 08, 2018 3:46 PM

To: Subject: Rodriguez, Enrique (CBSC)@DGS

Attachments:

City of Richmond Fire Department - 2016 Code Adoption 18-16 N.S. 2016 Fire Code Adoption - CONFORMED.pdf

Enrique,

Please find attached a copy of The City of Richmond 2016 California Fire Code Ordinance to put on fire with the California Building Standards Commission (CBSC).

Respectfully,

Fire Marshal
Eric Govan
Richmond Fire Prevention Services Division
440 Civic Center Plaza (2<sup>nd</sup> Floor)
Richmond, CA 94804
(510) 307-8046 office

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"An ounce of prevention is worth a pound in cure" Benjamin Franklin



### ORDINANCE NO. 18-16 .N.S.

AN ORDINANCE OF THE CITY OF RICHMOND AMENDING CHAPTER 8.16 OF THE MUNICIPAL CODE OF THE CITY OF RICHMOND WHICH ESTABLISHES THE FIRE PREVENTION CODE FOR THE CITY OF RICHMOND AND ADOPTS THE 2016 CALIFORNIA FIRE CODE WITH LOCAL AMENDMENTS

The Council of the City of Richmond does ordain as follows:

## SECTION I. AMENDMENT OF CHAPTER 8.16.

Chapter 8.16 of the Municipal Code of the City of Richmond is hereby amended to read:

#### Chapter 8.16

#### FIRE PREVENTION CODE

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8.16.010	Adoption of the California Fire Code.	
8.16.020	Establishment and duties of Fire Prevention Division.	
8.16.030	Definitions.	
8.16.035	Findings and Conclusion.	
8.16.040	Amendments to the California Fire Code.	
8.16.050	New materials, processes or occupancies which may require permits.	
8.16.060	Fire hazards and nuisances - Abatement.	
8.16.065	Emergency Response Cost Recovery Fee.	
8.16.070	Smoke and carbon monoxide detectors.	
8.16.080	Very High Fire Hazard Severity Zones.	
8.16.090	False Fire Alarms.	

## 8,16.010 Adoption of the 2016 California Fire Code

Sections:

There is adopted by the city for the purpose of prescribing regulations governing conditions hazardous to life property from fire, and explosion. Adoption of text of the International Fire Code and The California Fire Code, 2016 Edition (California Code of Regulations, Title 24, Part, 9 [based on the 2015 International Fire Code published by the International Code Council]), hereinafter referred to as the "California Fire Code" or the "Code," is hereby adopted by this reference subject to the changes, additions, and deletions (amendments) set forth in this ordinance. The California Fire Code referred to in this ordinance includes Appendix Chapters: A, B, C, D, E, F, G, H, I & J, as amended by the changes, additions and deletions set forth in this ordinance. In addition, all applicable reference standards will be included as part of this ordinance. Three copies of the 2016 California Fire Code are on file in the Office of the City Clerk for use and examination by the public.

## 8.16.020 <u>Establishment and duties of the Fire Prevention Division.</u>

- (a) The California Fire Code shall be enforced by the Fire Prevention Division in the Fire Department of the City of Richmond, hereinafter referred to as the "Richmond Fire Department", which is hereby established and which shall be operated under the supervision of the Chief of the Richmond Fire Department, hereinafter referred to as the "Fire Chief."
- (b) The Fire Marshal in charge of the Fire Prevention Division shall be appointed by the Fire Chief.
- (c) The Chief of the Fire Department shall recommend to the City Manager the employment of technical staff members, who, when such authorization is made, shall be selected on the basis of examination to determine their qualifications for the position.

(d) The Fire Chief may designate and direct certified and or qualified members of the suppression forces toward the enforcement of the California Fire Code.

#### 8.16.030 Definitions.

- (a) Wherever the word "jurisdiction" is used in the in California Fire Code, it means the City of Richmond.
- (b) Wherever the words "Fire Code Official" are used they mean Fire Marshal.
- (c) Wherever the words "Fire Chief" are used in the California Fire Code they mean the Fire Chief of the City of Richmond, or said Fire Chief's authorized representative. The term "Chief" also means Fire Chief.
- (d) Wherever the words "Key Box" are used in the California Fire Code they mean Knox Box.

## 8.16.035 Findings and Conclusion.

- (a) <u>Findings</u>. Pursuant to Sections 17958.5 and 17958.7 of the State of California Health and Safety Code, the City Council of the City of Richmond finds that the following changes or modifications are needed and are reasonably necessary because of certain local climatic, geological and topographic conditions.
- (b) <u>Local Conditions</u>. The following local conditions make necessary the changes or modifications in the California Fire Code and the State Building Standards Code in order to provide a reasonable degree of fire and life safety in the City.

#### (1) Climatic.

## (a) Precipitation and Relative Humidity.

Precipitation ranges from 15 to 24 inches per year with an average of 15 inches per year. Ninety percent falls during the months of October through March and 10 percent from April through September.

Typically, 0.8 percent of rainfall occurs during the fire season. This is a dry period of at least six months. Additionally, the area is subject to recurrent drought. The Climatic region is currently in a drought phase that has lasted eight years. A previous drought began in 1978 and lasted four years. Additional droughts can be expected locally in the future.

Relative humidity remains in the middle range most of the time. It ranges from 45 to 65 percent during spring, summer and fall; and from 60 to 90 percent in the winter. The coastal fog that occasionally occurs can raise summer humidity, particularly at night. Summer humidity can fall as low as 12 percent.

#### (b) Temperature.

Temperatures have been recorded as high as  $106^0$  F. Average summer highs are in the  $90^0$ F range.

#### (c) Winds.

Prevailing winds in the area are from the south or southwest in the mornings and from the north or northwest in the afternoons. However, winds are experienced from virtually every direction at one time or another. Velocities are generally in the 14 miles per hour (MPH) to 23 MPH range, gusting from 25 to 35 MPH. Forty (40) MPH winds are experienced occasionally and winds up to 55 MPH have been registered locally. During the winter half of the year, strong, dry, gusty winds from the north move through the area for several days, creating extremely dry conditions.

### (d) Impact.

The above-referenced local climatic conditions affect the acceleration, intensity, and size of fire in the community. Times of little or no rainfall, of low humidity, and high temperatures create extremely hazardous conditions, particularly as they relate to wood shake and single roof fires and conflagrations. The winds experienced in this area can have a tremendous impact upon structure fires of buildings in close proximity to one another commonly found in the City of Richmond. During wood shake and shingle roof fires, or exposure fires, winds can carry sparks and burning brands to other structures, thus spreading the fire and causing conflagrations.

Hot, dry winds that can be experienced any time of the year can force a fire to move in any direction in heavily vegetated interface areas. In building fires, winds can literally force fires back into the building and can create a blow torch effect, in addition to preventing "natural" ventilation and cross-ventilation efforts. Winds, high temperatures, and low humidity expose the entire community to the threat of conflagration.

#### (2) Geological.

#### (a) Seismicity.

Contra Costa County is located in Seismic Risk Zone 4, which is the worst earthquake area in the United States. Buildings and other structures in Zone 4 can experience major seismic damage. Contra Costa County is in close proximity to the San Andreas Fault and contains all or portions of the Hayward, Calaveras, Concord, Antioch, Rodgers, Mt. Diablo, and other lesser faults. The Hayward fault has been identified as a likely sight for a major earthquake event in the 7+ Richter range. Minor tremblers from seismic activity are not uncommon in the area.

#### (b) Impact.

Earthquakes of the magnitude experienced locally can cause major damage to electrical transmission facilities which, in turn, cause power failures while at the same time starting fires throughout the city. The occurrence of multiple fires will quickly deplete existing fire department resources, thereby reducing and/or delaying their response to any given fire. Additionally, without electrical power, elevators, smoke management systems, lighting systems, alarm systems and other electrical equipment urgently needed for building evacuation and fire control in large buildings would be inoperative, thereby resulting in loss of life and/or major fire losses in such buildings.

The above local geologic conditions increase the magnitude, exposure, accessibility problems, and fire hazards presented to the City of Richmond. Fire following an earthquake has the potential of causing greater loss of life and damage than the earthquake itself. Hazardous materials, particularly toxic gases, could pose the greatest threat to the largest number, should a significant seismic event occur. Public Safety resources would have to be prioritized to mitigate the greatest threat, and may likely be unavailable for smaller single dwelling or structure fires. Other variables may tend to intensify the situation, such as:

- (1) The extent of damage to the water system;
- (2) The extent of isolation due to bridge and/or freeway overpass collapse;
- (3) The extent of roadway damage and/or amount of debris blocking the roadway;
- (4) Climatical conditions (hot, dry weather with high winds);
- (5) Time of day will influence the amount of traffic on roadways and could intensify the risk to life during normal business hours;
- (6) The availability of timely mutual aid or military assistance; or
- (7) The likelihood that small fires will rapidly grow to conflagration proportions.

#### (3) Topographic.

### (a) Soils.

The area is replete with various soils which are unstable; clay loam and alluvial fans being predominant. These soil conditions are moderately to severely prone to swelling and shrinking, are plastic and tend to liquefy.

## (b) <u>Vegetation</u>.

Highly combustible dry grass, weeds and brush are common in the hilly and open space areas adjacent to built-up locations six to eight months of each year. Many of these areas frequently experience wildland fires which threaten nearby buildings, particularly those with wood roofs or sidings. This condition can be found throughout the City, especially in wildland interface areas.

#### (c) <u>Surface Features</u>.

The arrangement and location of natural and man made surface features, including hills, canyons, creeks, steep slopes, and historical slides, housing developments, commercial developments, fire stations, streets and roads, combine to limit feasible response routes for fire resources. Fires moving through steep terrain can move 16-30 times faster than on level ground. Erratic terrain and erratic winds can cause fires to grow in an unpredictable manner.

### (d) <u>Buildings, Landscaping and Terrain</u>.

Many commercial and residential buildings and apartment complexes have building and landscape features and designs which preclude or greatly limit any approach or operational access to them by fire department vehicles. There are many concentrations of houses and other buildings with untreated wood shake or shingle roofs or sidings in the City which are well within 10 feet of each other. There are many such buildings to which access to all but one side is made virtually impossible due to landscaping, fences, electrical transmission lines, slopes or other buildings.

#### (e) <u>Electrical Transmission Equipment.</u>

Above-ground electrical power transmission lines suspended on poles and towers exist throughout the City. Many of the power poles are nearing the end of their useful life and would fail early in an area-wide fire. Many power line poles are located adjacent to streets and roads and many of the transmission wires area suspended above dry vegetation and untreated wood shake or shingle roofs. These cables are also suspended above large areas of dry vegetation and untreated wood shake or shingle roofs.

#### (f) Impact.

The previously listed local topographical conditions increase the magnitude, exposure and accessibility problems associated with the fire hazards which arise within the City. Should a significant emergency event occur, such as an area-wide conflagration, public safety resources would have to be prioritized to mitigate the greatest threat, and may likely be unavailable for smaller single dwelling or structure fires. Other variables may tend to intensify the situation, such as:

- 1) The extent of damage to the water system;
- (2) The extent of isolation due to bridge and/or freeway overpass collapse;
- (3) The extent of roadway damage and/or amount of debris blocking the roadways;
- (4) Climatical conditions (hot, dry weather with high winds);
- (5) Time of day will influence the amount of traffic on roadways and could intensify the risk to life during normal business hours;

(6) The likelihood that small fires will rapidly grow to conflagration proportions.

## (g) <u>Conclusion</u>.

Local climatic, geologic and topographic conditions impact fire prevention efforts, and the frequency, spread, acceleration, intensity, and size of fires which involve buildings in this community. Further, the local climatic, geologic and topographic conditions impact potential damage to all structures from earthquake and subsequent fire. Therefore, it is found to be reasonably necessary that the 2016 California Fire Code be changed or modified to mitigate the effects of the risks associated with the above conditions.

## 8.16.040 Amendments to the California Fire Code.

Pursuant to Section 17958 of the State of California Health and Safety Code, the City Council of the City of Richmond, in adopting and amending the 2016 Edition of the California Fire Code, changes or modifies such provisions which are described in the following sections. The following changes and/or modifications to the 2016 Edition of the California Fire Code are found to be reasonably necessary to mitigate the impacts described above which are caused by the above described local climatic, geological and topographic conditions. The pertinent chapters and sections of the California Fire Code which are amended are as follows:

## A. Amendment of Chapter 1, Scope and Administration is amended as follows:

- (1) Section 101.1 is amended to read as follows:
  - (a) Section 101.1 Title. These regulations shall be known as the Fire Code of the City of Richmond, hereinafter referred to as "this code."
- (2) Section 102.1 is amended by adding item (5) to the following:
  - (a) Section 102.1 Construction and design provisions.
    - 5. Where not otherwise limited by law, the provisions of this code shall apply to vehicles, ships, boats, trains, and mobile vehicles when said vehicles are fixed in a specific location within the boundaries of this jurisdiction.
- (3) Section 103.5 is amended by adding a subsection to read as follows:
  - (a) Section 103.5 Fire Prevention Personnel as Peace Officers The Fire Chief and said Chief's designees shall have the powers of peace officers while engaging in the performance of their duties with respect to the prevention, investigation and suppression of fires and the protection and prevention of life and property against the hazards of fire and conflagration.

The Fire Chief, or his duly authorized agents, may issue citations for violations of this ordinance in the same manner as a county or city is authorized to do so by Chapter 5C (commencing with Section 853.5), Title 3, Part 2, of the California Penal Code.

- (4) Section 104.2.1 is amended by adding subsection to read as follows:
  - (a) Section 104.2.1 Plan Review. Whenever any land is to be developed or a building is to be constructed, before undertaking any construction or development, applicants shall submit building plans and specifications to the Richmond Fire Department which includes an aerial pre-fire plan for said Department's retention and review for compliance with this ordinance and other applicable regulations.

- (5) Section 104.2.2 is amended by adding subsection to read as follows:
  - (a) Section 104.2.2. Development Requirements. This section shall be applicable whenever any land is developed or a building is constructed or improved which would require:
    - 1. Provision of a water supply for fire protection;
    - 2. Provision of access for fire apparatus;
    - An occupancy for the storage, handling, or use of any hazardous substance, material process or device;
    - Occupancies for which a fire department has responsibility for enforcement of laws or ordinances for fire safety or for the preservation of property or lives; or
    - 5. Provisions to control the spread of fire.
- (6) <u>Section 104.12</u> is amended by adding subsection to read as follows:
  - (a) Section 104.12. Fire Chief Fire Prevention Scope. The Fire Chief may order, in writing, the correction, elimination or abatement of any fire or life hazard or any violation of this ordinance including the code and standards incorporated by reference herein when the correction, elimination or abatement is necessary for the prevention or suppression of fires or conflagrations or for the protection or preservation of life or property against the hazards of fire or conflagration.
- (7) <u>Section 104.12.1</u> is amended by adding subsection to read as follows:
  - (a) Section 104.12.1 Penalties. Every person who violates any provision of this ordinance, and any provision of the California Fire Code as adopted by reference herein, is guilty of a misdemeanor. The imposition of one penalty for any violation shall not excuse the violation or permit it to continue. Any violator shall be required to correct or remedy such violations or defects within a time specified by the Fire Chief or, when not otherwise specified, within ten (10) days. The application of the aforesaid misdemeanor penalty shall not be held to prevent the enforced removal of prohibited conditions.

This section is drafted pursuant to Section 13871 of the Health and Safety Code and is not intended to create a different or separate penalty.

- (8) Section 105.6 is amended to read as follows:
  - (a) Section 105.6 Required operational permits. The fire code official is authorized to issue operational permits for the operations set forth in Sections 105.6.1 through 105.6.58. Make sure all operational permits are numbered correctly.
- (9) Table 105.6.9 is amended to read as follows:
  - (a) Table 105.6.9. Permit Amounts for Compressed Gases. Only the listed amount for Inert and simple asphyxiant is amended to read 1,000 cubic feet at NTP. The remaining gases listed remain unchanged.

	Amount
TYPE OF GAS	(cubic feet at NTP)
Inert and simple asphyxiant	1,000 <sup>a</sup>

- a. For carbon dioxide used in beverage dispensing applications, see Section 105.6.4.
- (10) Section 105.6.31.1 is added to read as follows:
  - (b) Section 105.6.31.1 Tank Vehicle Dispensing. An operational permit is required the fueling of motor vehicles at approved locations from a tank vehicle. Also includes the limited or temporary fueling operations for special events (i.e. fueling or watercraft from shore, piers, floats, or barges).

- (11) Section 105.6.48 is amended to read as follows:
  - (c) Section 105.6.48 Wood products. An operational permit is required to store chips, hogged material, wood or other combustible pallets, lumber or plywood in excess of 200 cubic feet (6 m3).
- (12) Section 105.6.50 is amended by adding subsection to read as follows:
  - (a) Section 105.6.50 Temporary assembly permit. A temporary assembly permit is required 10 days prior to conduct an event that will assemble more than 1,000 people. Any event that has more than 3,000 people shall require two personnel from the Fire Prevention Division for the duration of the event to ensure that compliance of all codes are adhered to. A site floor plan review and inspection fee will be assessed. A floor plan outlining, but not limited to, the following is required.
    - 1. Number of people expected to attend
    - 2. Number of exits
    - 3. Location of fire extinguisher
    - 4. Location of tables & chairs
    - 5. Location of stage
    - 6. Location of tents requires separate permit
    - 7. Location of cooking area(s)
    - 8. Location of any open flames used for cooking or decorating
- (13) Section 105.6.51 is amended by adding subsection to read as follows:
  - (a) Section 105.6.51 Christmas tree sales permit. An operational permit is required to engage in the business of Christmas tree sales.
- (14) Section 105.6.52 is amended by adding subsection to read as follows:
  - (a) Section 105.6.52 Asbestos removal. A permit is required to conduct asbestos-removal operations regulated by Section 3319.
- (15) <u>Section 105.6.53</u> is amended by adding subsection to read as follows:
  - (a) Section 105.6.53 Battery systems. A permit is required to operate stationary lead-acid battery systems having a liquid capacity of more than 50 gallons (189 L) pursuant to Section 608.
- (16) Section 105.6.54 is amended by adding subsection to read as follows:
  - (a) Section 105.6.54 Firework aerial display. A permit is required to conduct a firework display regulated by California Code of Regulations, Title 19 and Chapter 56 of this code.
- (17) Section 105.6.55 is amended by adding subsection to read as follows:
  - (a) Section 105.6.55 Model rockets. A permit is required to sell model rocket motors or launch model rockets (in excess of 3 launches per event) pursuant to California Code of Regulations, Title 19, Division 1, Article 17.
- (18) Section 105.6.56 is amended by adding subsection to read as follows:
  - (a) Section 105.6.56 Temporary water supply. A permit is required to use a temporary water supply for construction of residential projects or subdivisions pursuant to Section 3312.1.
- (19) Section 105.6.57 is amended by adding subsection to read as follows:
  - (a) Section 105.6.57 Tire storage. A permit is required to store more than 1,000 cubic feet (28.3m3) of tires inside buildings pursuant to Chapter 34.

- (20) Section 105.6.58 is amended by adding subsection to read as follows:
  - (a) Section 105.6.58 Change of occupancy/Site or miscellaneous inspection. A permit is required for a requested inspection for the change of occupancy including, but not limited to inspections conducted when required by Building Official, Planning, or other governmental agency and where not elsewhere listed.
- (21) Section 105.7.1 is amended to read as follows:
  - (a) Section [A] 105.7 Required construction permits. The fire code official is authorized to issue construction permits for work as set forth in Sections 105.7.1 through 105.7.24.
- (22) Section 105.7.3 is amended to read as follows:
  - (a) Section 105.7.3 Compressed Gases

    Exception #1: Routine maintenance requires approval by fire code official.
- (23) Section 105.7.10 is amended to read exception item #1 as follows:
  - (b) Section 105.7.10 Hazardous Materials Exception #1: Routine maintenance requires approval by fire code official.
- (24) Section 105.7.19 is amended by adding subsection to read as follows:
  - (a) Section 105.7.19 Access for fire apparatus. Plans shall be submitted and a permit is required to install, improve, modify, or remove public or private roadways, driveways, and bridges for which Fire Department access is required by the Fire Code. A permit is required to install a gate across a fire apparatus access road pursuant to Section 503 and 105.7.9.
- (25) Section 105.7.20 is amended by adding subsection to read as follows:
  - (a) Section 105.7.20 Construction, alteration, or renovation of building for which a building permit is required. Plans shall be submitted to the fire code official for all land developments or for the construction, alteration, or renovation of a building within the City where a building permit is required.
  - (b) Section 105.7.20.2 Pre-construction inspection. An inspection shall be conducted by an inspector from the Richmond Fire Prevention Division along with the closest responding engine company once any combustible materials are delivered on-site pursuant to Section 3312.1.
    - Exception: Non-sprinklered Group R-3 Occupancies where work does not involve a substantial addition or expansion.
- (26) Section 105.7.21 is amended by adding subsection to read as follows:
  - (a) Section 105.7.21 Medical gas systems. A construction permit is required for the installation of, or modification to, a medical gas system pursuant to Section 5306.
- (27) Section 105.7.22 is amended by adding subsection to read as follows:
  - (a) Section 105.7.22 Refrigeration equipment. A permit is required to install a mechanical refrigeration unit or system regulated by Chapter 6.
- (28) Section 105.7.23 is amended by adding subsection to read as follows:
  - (a) Section 105.7.23 Land Development, Subdivisions. Plans shall be submitted to the fire code official for all land developments or improvements proposed within the jurisdiction that involve the subdivision of land.

- (29) Section 105.7.24 is amended by adding subsection to read as follows:
  - (a) Section 105.7.24 Water supply for fire protection. Plans shall be submitted to the fire code official for the purpose of determining whether adequate water supplies, fire hydrants, and associated systems are provided for all facilities, buildings or portions of buildings either constructed or moved into the City pursuant to Section 507 and Section 3312.1.
- (30) Section 105.8 & 105.8.1 is added to read as follows:
  - (a) Section 105.8 Responsibility of construction permittee. Construction permits shall be presumed by the Fire Prevention Division to incorporate all of the work that the applicant, the applicant's agent, employees and/or contractors shall carry out. Work performed shall be in accordance with the approved plans and with all requirements of this code and any other laws or regulations applicable thereto. No Fire Prevention Division approval shall relieve or exonerate any person from the responsibility of complying with the provisions of this code nor shall any vested rights be created for any work performed in violation of this code.
  - (b) Section 105.8.1 Responsibility of operational permitee. Operational permits shall be presumed by the Fire Prevention Division to incorporate all of the requirements of the operational permit that the applicant, the applicant's agent, employees and/or contractors shall carry out. All requirements shall be in accordance with this code and any other laws or regulations applicable thereto. No Fire Prevention Division approval shall relieve or exonerate any person from the responsibility of complying with the provisions of this code nor shall any vested rights be created for any requirements not followed in violation of this code.
- (31) Section 109.4 is amended to read as follows:
  - (a) Section 109.4 Violation penalties. Persons who shall violate a provision of this code or shall fail to comply with any of the requirements thereof or who shall erect, install, alter, repair or do work in violation of the approved construction documents or directive of the fire code official, or of a permit or certificate used under provisions of this code, shall be guilty of a misdemeanor, punishable by a fine of not more than \$5,000 dollars, in accordance with Government Code Section 530694. The imposition of one penalty for any violation shall not excuse the violation or permit it to continue. All such persons shall be required to correct or remedy such violations or defects within a reasonable time. When not otherwise specified, 10 days will apply. Each day that a violation continues after due notice has been served shall be deemed a separate offense.
- (32) Section 111.4 is amended to read as follows:
  - (a) Section 111.4 Failure to Comply. Any person who shall continue any work after having been served with a stop work order, except such work as that person is directed to perform, remove a violation or unsafe condition, shall be liable to a fine of not less than \$250.00 dollars or more than \$2,000.00 dollars.
- (33) Section 113.2.1 is amended by adding subsection read as follows:
  - (a) Section 113.2.1 Local Fees. The City Council may, by resolution, establish a schedule of non-discriminatory fees to be charged and collected, solely to defray the Richmond Fire Department's reasonable costs for plan review of fire protection equipment and systems, including, but not limited to, the plans set forth in Section 105.1.2; requested or required inspection services; and issuance of permits. Such fees shall become effective only after the City Council has reviewed such and approved the fee schedule. At least one copy of such approved fee schedule shall be filed with the City Clerk's Office. Additional copies shall be kept in the main business office of the Richmond Fire Department for reference by, and distribution to, the public.
- (34) Section 113.6 is amended by adding subsection to read as follows:

Section 113.6 Fire Suppression and Emergency Mitigation Fees. The Richmond Fire Department may charge fees that reasonably constitute the cost of suppression of any fire or emergency mitigation against a property owner or other responsible person when the fire or emergency is a result of that person's violation of any federal, state statute or local ordinance. The Richmond Fire Department may charge fees to recover the reasonable costs of services

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necessary to protect the public health and safety associated with motor vehicle incidents, hazardous materials spills, discharges or threatened discharge of hazardous (or suspected hazardous) materials, motor vehicle fires, motor vehicle extrications, pipeline or power line incidents, and origin and cause investigations.

## B. Amendment of Chapter 2 Definitions is amended as follows:

- (1) Section 202-A Definitions is amended by adding the following.
  - (a) Administrator shall mean the Fire Chief.
  - (b) All-weather driving surface. A roadway with a minimum surface finish of one layer of asphalt or concrete that is designed to carry the imposed weight loads of fire apparatus.
- (2) Section 202-D is amended by adding the following:
  - (a) Defensible space is a concept in landscape design for homes which provides a band of managed vegetation around a home that slows movement of fire by reducing or denying fuel and provides a space for fire fighters to take a stand to protect the house.
  - (b) Driveway is a private roadway that provides access to no more than two (2) single-family dwellings.
- (3) Section 202-F is amended by adding the following definitions to read as follows:
  - (a) Firebreak: An area in which all flammable vegetation or combustible growth is removed and cleared away, thereby <u>eliminating</u> fire hazardous vegetation fuels which can rapidly transmit fire. Ornamental landscaping is permissible within a firebreak as long as it is adequately irrigated, maintained and spaced so as not to provide a means of rapidly transmitting fire. (Compare to fuel break).
  - (b) Fire hazardous vegetation: Plants which can burn easily because they generate dry undergrowth, contain flammable oils or produce significant quantities of dead or dying material. Hazardous vegetation is fuel which must be removed or strictly maintained so as not to constitute a fire hazard by igniting easily and then contributing to rapid fire spread. Seasonally dry grass, weeds, brush, and trees and ornamental vegetation that are not maintained or irrigated are examples of fire hazardous vegetation. Properly chipped, mulched and disbursed material does not constitute fire hazardous vegetation. Fire hazardous vegetation is also known as flammable vegetation and combustible growth.
  - (c) Fire resistant plants: A relative term used to describe plants that are more resistant or less resistant than other plants to fire. Given enough heat, <u>all</u> vegetation will burn. Yet plants in fact differ in how fast they burn, how high a flame they produce and their ability to survive fire. Fire resistance is enhanced by higher amounts of moisture within twigs and foliage. Fire-resistant plants can lose this quality altogether if not properly maintained and irrigated.
  - (d) Firetrail: A graded firebreak of sufficient width, surface, and design to provide access for personnel and equipment to suppress and to assist in preventing a surface extension of fires.
  - (e) Fuel break: An area in which all flammable vegetation or combustible growth is reduced and cleared away according to established standards, thereby <u>limiting</u> the mass and arrangement of fire hazardous vegetation fuels which can rapidly transmit fire. Appropriate ornamental landscaping is permissible within a fuel break. Fuel reduction standards for fuel breaks limit the height of certain vegetation (brush, native shrubs, weeds and grasses), remove from trees any fuels which can ladder into the canopies, and provide adequate spacing between remaining plants.
- (4) Section 202-K is amended to add a definition and read as follows:
  - (a) Knox Box: (Underwriters Laboratory) UL "Listed" box, size and style, approved by the Fire Code Official or designee that meets the requirements and uses the same security key code adopted by the Fire Department.

- (5) Section 202-M is amended to add a definition and read as follows:
  - (a) Multi-Family Residential Structures: Multi-family residential structures comprised of four (4) or more units which access to the building or common areas, mechanical or an electrical room within the building is denied through locked doors.
- (6) Section 202-N is amended to add a definition and read as follows:
  - (a) Nuisance Fire Alarm: The activation of any fire protection or alarm system which results in the response of the Richmond Fire Department and is caused by malfunction, improper maintenance, negligence, or misuse, of the system by an owner, occupant, employee, or agent, or any other activation not caused by excessive heat, smoke, fire, or similar activating event.
- (7) Section 202-O is amended by adding the following:
  - (a) Ornamental landscaping: Decorative plants growing within a tended garden or yard which are appropriately irrigated, maintained and located to provide aesthetic decoration and functional utility, such as privacy screening, shade, weed suppression and erosion control. The use of fire-resistant plants and the removal of fire hazardous vegetation will enhance fire safety.
- (8) Section 202-P is amended by adding the following:
  - (a) Protected aboveground tank: A listed tank system consisting of a primary tank provided with protection from physical damage, and fire-resistive protection from a high-intensity liquid pool fire exposure. The tank system is allowed to provide these protection elements as a unit or is allowed to be an assembly of components, or a combination thereof.
- (9) Section 202-R is amended by adding the following:
  - (a) Responsible Party: The person(s) charged with the responsibility for the occupancy, building or business owner.
  - (b) Residential Group R-2: Residential occupancies containing sleeping units or more than two dwellings units where the occupants are primarily permanent in nature, including: Apartments houses, Boarding houses (non-transient) with more than 16 occupants, Condominiums, Congregate residences (non-transient) with more than 16 occupants, Convents, Dormitories, Fraternities and Sororities, Hotels (non-transient), Live/work units, Monasteries, Motels (non-transient), Vacation timeshare properties.
- (10) Section 202-S is amended by adding the following:
  - (a) Security Padlock: When a property is protected by a locked fence or gate and where immediate access to the property is necessary for lifesaving and firefighting purposes, it shall be equipped with a Knox security padlock to be installed at a location approved by the Fire Code Official or his designee. It shall then be the responsibility of the responsible party to see that the fence or gate is secured properly so that the security padlock is accessible.
  - (b) Security Cap: A Fire Department Connection (FDC) plug and cap approved for use in the City of Richmond by the Fire Official or designee utilizing 2 1/2" National Standard thread pattern.
  - (c) Sprinkler alarm and Supervisory system (SASS): A Dedicated Function Fire Alarm System located at the protected premise installed specifically to monitor sprinkler waterflow alarm, valve supervisory, and general trouble conditions where a building fire alarm is not required.
  - (d) Substantial Addition or Expansion: Addition, expansion, remodel, or renovation of any structure where the addition of new fire area exceeds fifty percent of the existing fire area.

- (11) Section 202-T is amended by adding the following:
  - (a) Temporary fire department access road for construction: An approved temporary roadway for emergency vehicle use during construction of residential subdivision projects.
  - (b) Temporary fire department access road for construction of one (1) residential (R3) unit. A temporary roadway for emergency vehicle use during construction of an individual residential (R3) structure where a fire department access road is required as part of the project.
  - (c) Temporary water supply. Water stored for firefighting purposes in an approved aboveground tank during combustible construction.
  - (d) Tree litter. Any limbs, bark, branches and/or leaves in contact with other vegetation or left to gather on the ground.
- (12) Section 202-V is amended by adding the following:
  - (a) Very High Fire Hazard Severity Zones (VHFHSZ): Any geographic area designated pursuant to California Government Code Section 51178 to contain the type and condition of vegetation, topography, weather and structure density to potentially increase the possibility of wildland conflagration fires. As a community adjacent to extensive wildland areas, the City of Richmond contains several VHFHS zones. A map of these zones is available from the Richmond Fire Department. Fire hazard reduction standards are more extensive for properties located within VHFHS zones.
- C. Amendment of Chapter 3 General Requirements is amended as follows:
- (1) Section 304.1.2 is added to read as follows:
  - (a) Section 304.1.2 Vegetation. A hazard created by the growth of weeds, grass, vines, trees or other growth capable of being ignited and endangering property shall be mitigated.
- (2) Section 304.1.4 is added to read as follows:
  - (a) Section 304.1.4 Clothes Dryers. Clothes dryers shall be frequently cleaned to maintain the lint trap, mechanical and heating components, vent duct and associated equipment free from accumulation of lint and combustible materials.
- (3) Section 308.1.4 Exception 1 is added to read as follows:
  - (a) Section 308.1.4 Exception 1. Residential Occupancies.
- (4) Section 320 Automobile Wrecking Yards is added to read as follows:
- (5) Section 320.1 is added to read as follows:
  - (a) Section 320.1 Automobile Wrecking Yard/Dismantling General. The operation of automobile wrecking yards shall be in accordance with this section.
- (6) Section 320.2 is added to read as follows:
  - (a) Section 320.2 Definitions is added to read as follows:
    - 1. Automobile Wrecking Yard. An area that stores or dismantles salvaged vehicles.
    - Automobile Dismantling. The operation of dismantling or removing parts from salvaged vehicles including engines or engine parts.
- (7) Section 320.3 is added to read as follows:
  - (a) Section 320.3 Requirements:

- (8) Section 320.3.1 is added to read as follows:
  - (a) Section 320.3.1 Permits. An operation permit is required for all automobile wrecking yards, automobile dismantling operations, and similar operations.
- (9) Section 320.3.2 is added to read as follows:
  - (a) Section 320.3.2 Fire Apparatus Access Roads. Fire apparatus access roads shall be constructed throughout the site in accordance with this code and shall be maintained clear of all vehicles and stored items.
- (10) Section 320,3.3 is added to read as follows:
  - (a) Section 320.3.3 Welding and cutting. An operational permit is required for welding and cutting operations, which shall be conducted in an approved location, clear of all flammable liquids and combustible materials, including weeds, tires and all other debris.
- (11) Section 320.4.4 is added to read as follows:
  - (a) Section 320.3.4 Housekeeping. Combustible rubbish accumulated on-site shall be collected and stored in approved containers, rooms or vaults of non-combustible materials. Combustible vegetation, cut or uncut, shall be removed when determined by the fire code official to be a fire hazard.
- (12) Section 320.3.5 is added to read as follows:
  - (a) Section 320.3.5 Fire Protection. Offices, storage buildings and vehicles used for site operations shall each be provided with at least one portable fire extinguisher with not less than a 4-A:40-B-C rating. When required by the fire code official, additional fire extinguishers shall be provided.
- (13) Section 320.3.6 is added to read as follows:
  - (a) Section 320.3.6 Tire storage. Tires shall be stored in racks or in a manner as approved by the fire code official.
- (14) Section 320.3.7 is added to read as follows:
  - (a) Section 320.3.7 Distance from Water Supply. Tire storage shall be located on-site and no further than 500 feet from a fire hydrant or an approved water supply as determined by the fire code official.
- (15) Section 320.3.8 is added to read as follows:
  - (a) Section 320.3.8 Storage Piles. Storage piles shall be located a minimum of 20 feet from property lines and shall have an unobstructed access road on all sides of not less than 20 feet.
- (16) Section 320.3.9 is added to read as follows:
  - (a) Section 320.3.9 Burning operations. The burning of salvaged vehicles and salvaged or waste materials is prohibited.
- (17) Section 320.3.10 is added to read as follows:
  - (a) Section 320.3.10 Motor vehicle fluids. Motor vehicle fluid shall be drained from salvaged vehicles when such liquids are leaking onto the ground and prior to dismantling or removing engine/motor parts.

- (18) Section 320.3.10.1 is added to read as follows:
  - (a) Section 320.3.10.1 Mitigation of leaking fluids. Precautions shall be taken to prevent fluids from salvaged vehicles from leaking on to the ground. Supplies or equipment capable of mitigating leaks from fuel tanks, crankcases, brake systems and transmissions shall be kept available on-site. Single-use plugs, diking and absorbent materials shall be disposed of as hazardous waste and removed from the site in a manner in accordance with federal, state and local requirements.
- (19) Section 320.3.11 is added to read as follows:
  - (a) Section 320.3.11 Fuel tanks. Fuel tanks of salvaged vehicles shall be emptied of all flammable fuels (gasoline, diesel) in an approved manner and stored in approved tanks.
- (20) Section 320.3.11.1 is added to read as follows:
  - (a) Section 320.3.11.1 Repair of vehicle fuel tanks. The repair of fuel tanks, including cutting, welding or drilling of any kind, is prohibited.
- (21) Section 320.3.12 is added to read as follows:
  - (a) Section 320.3.12 Lead acid batteries. Lead acid batteries shall be removed from all salvaged vehicles and stored in an approved manner in a location approved by the fire code official.
- D. Amendment of Chapter 4 Emergency Planning and Preparedness is amended as follows:
- (1) Section 401.5.1 is added to read as follows.
  - (a) Section 401.5.1 Unwarranted fire alarm notification. Notification of emergency responders based on an unwarranted alarm may be punishable by a fine. In addition, the responsible party may be liable for the operational and/or administrative costs incurred from the emergency response and/or mitigation procedures resulting from an unwarranted fire alarm notification.
- (2) Section 401.10 is added to read as follows.
  - (b) Section 401.10 Aerial Pre-Plans. The fire official is authorized to require an approved fire aerial pre-plan and evacuation plan to be prepared and maintained for the occupancies outlined in section 408.2.
- (3) Section 402 is amended to add a definition and read as follows.
  - (a) Section 402 Definitions. Unwarranted fire alarm notification. The giving, signaling or transmission of an alarm notification to a public fire station or emergency communications center when such alarm is the result of a defective condition of an alarm system, system servicing or testing, construction activities, ordinary household activities or other cause when no such danger exists.
- (4) Section 408 Aerial Pre-Plans is added to read as follows.
  - (a) Section 408.1 General. Where required by the fire code official aerial pre-plans, evacuation plans shall comply with the requirements of Sections 408.2 through 408.5.1.
- (5) Section 408.2 is added to read as follows.
  - (a) Section 408.2 Where required. An approved fire aerial pre-plan and evacuation plan shall be prepared and maintained for the following occupancies and buildings.
    - Group A, other than Group A occupancies used exclusively for purposes of religious worship that have an occupant load less than 1,000.

2. Group B buildings having an occupant load of 500 or more persons or more than 100 persons above or below the lowest level of exit discharge.

3. Group E.

- 4. Group F buildings having an occupant load of 500 or more persons or more than 100 persons above or below the lowest level of exit discharge.
- Group H. including any occupancy that is in the Contra Costa Health Services
   Hazardous Materials Programs larger than 5,000 square feet.

6. Group I.

- Group R-1. Residential occupancies containing twenty (20) or more sleeping units in complex.
- 8. Group R-2. Residential occupancies containing twenty (20) or more sleeping units in complex.
- Group R-4 Residential occupancies exceeding 3,000 square feet in aggregate floor area.

10. High-rise buildings.

11. Group M buildings having an occupant load of 500 or more persons or more than 100 persons above or below the lowest level of exit discharge.

12. Covered malls exceeding 50,000 square feet in aggregate floor area.

13. Open mall buildings exceeding 20,000 square feet in aggregate area within perimeter line.

14. Underground buildings.

- 15. Buildings with an atrium and having an occupancy in Group A, E or M
- (6) Section 408.3 is added to read as follows.
  - (a) Section 408.3 Contents of aerial pre-plans. Aerial pre-plans contents shall include but not be limited to the following in accordance with Section 408.1 & and 408.2:
    - 1. Knox Box and/or Haz Mat Knox cabinet location
    - 2. Fire Alarm Control Panel (FACP)
    - 3. Emergency vehicle access
    - 4. Post Indicator Valve (PIV)

OS&Y valve

- 6. Location of hazardous materials
- Sprinkler riser
- 8. Gas valve
- 9. Electrical main valve
- 10. Fire Department Connection (FDC)
- 11. Hydrant location
- 12. Elevator equipment room

## E. Amendment of Chapter 5 Fire Service Features is amended as follows:

- (1) Section 503.1.2.1 is amended by adding the following:
  - (a) Section 503.1.2.1 Access to Very High Fire Hazard Severity Zones and Open Space.
    - 1. It shall be unlawful to block access to any of the fire access roads into open space which are identified on lists or maps contained in the document entitled "Exhibit B Access Roads in Very High Fire Hazard Severity Zones," copies of which shall be maintained at the City Clerk's Office and at the Richmond Public Library. Any obstruction of an access road identified on said map shall be deemed to be a nuisance and shall be subject to abatement as set forth in Section 8.16.060 (c) of the Municipal Code of the City of Richmond.
    - 2. When access to open land/space or a fire trail system maintained for public or private use is obstructed by new development, the developer shall provide alternate access, approved by the Fire Department, for fire personnel and equipment. Any obstruction of access to open land/space or a fire trail system maintained for public or private use shall be deemed to be a nuisance and shall be subject to abatement as set forth in Section 8.16.060 (c) of the Municipal Code of the City of Richmond.

- (2) Section 505.3 is added to read as follows:
  - (a) Section 505.3 Street names and addressing. Street names and addressing shall be submitted for review and approval to the fire code official, whose approval will not be unreasonably withheld. The purpose of the review is to verify that new street names and addressing will not duplicate existing street names and addressing.
- (3) Section 506.1 is amended by adding Subsection 506.1 items number one (1) through number seven (7) to read as follows:
  - (a) Section 506.1 Where required. Where access to or within a structure or an area is restricted because of secured openings or where immediate access is necessary for life-saving or fire-fighting purposes, the fire official is authorized to require a Knox Rapid Entry System to be installed in an approved location. The Knox Rapid Entry System shall be of an approved type listed in accordance with UL 1037, and shall contain keys to gain necessary access as required by the fire code official. If any of the following items listed (1) thru (7) is located at an occupancy, then a Knox Rapid Entry System shall be required.
    - Fire suppression and standpipe systems. When a building within the city limits is
      protected by an automatic fire suppression and/or standpipe system, it shall be
      equipped with a Knox Rapid Entry System, installed at a location approved by the
      Fire Code Official or designee.
    - 2. Automatic Alarm Systems. When a building within the city limits is protected by an automatic fire suppression and/or standpipe system, it shall be equipped with a Knox Rapid Entry System, installed at a location approved by the Fire Code Official or designee.
    - Multi-family residential structures. Multi-family residential structures comprised
      of four (4) or more units which access to the building or common areas or
      mechanical or an electrical room within the building is denied through locked doors.
    - 4. Automatic Gates. When a property is accessed through a gate or cross arm that impedes ingress through required fire lanes by means of a key or swipe card, it shall be equipped with a key switch to be installed at a location approved by the Fire Code Official or designee.
    - 5. Security Padlock. When a property is protected by a locked fence or gate and where immediate access to the property is necessary for life saving and firefighting purposes, it shall be equipped with a security padlock to be installed at a location approved by the Fire Code Official or designee. It shall then be the responsibility of the responsible party to see that the fence or gate is secured properly so that the security padlock is accessible.
    - 6. Construction Sites. When a construction site is to be secured by a locked fence or gate, that site will fall under section 2 subsection E, during the duration of construction or until said fence or gate is removed. It shall then be the responsibility of the construction company to see that the fence or gate is secured properly so that the security padlock is accessible.
    - 7. Security of Fire Department Connections (FDC). When a building is protected by an automatic sprinkler and/or standpipe system and the fire department connection is exposed to vandalism, the Fire Code Official or designee shall require that a security gate be installed around the standpipe and that a Knox security cap be installed.

**Exception:** This shall not apply to any owner-occupied one and two family dwellings. Owners of single and two family occupancies are encouraged to participate voluntarily utilizing a residential key box.

- (4) Section 506.1.1 is amended to read as follows:
  - (a) Section 506.1.1 Locks. An approved lock(s) shall be installed on gate(s), or similar barrier(s) and security caps for all fire department connections to an automatic sprinkler and/or standpipe system.

## (5) <u>Section 506.1.3</u> is added to read as follows:

(a) Section 506.1.3 Knox Rapid Entry System storage cabinet contents. Any facility, firm, or corporation that handles, uses, or stores hazardous material and or total aggregate is more than 55 gallons of liquid, 500 pounds of solid, or 200 cubic feet of gas, shall have a Knox Box Haz Mat Cabinet, model #1100, for Richmond Fire Department use. A weatherproof cabinet, model #1201-WH, shall be installed when appropriate. Exception: not required for Underground Storage Tanks (UST).

The cabinet shall contain the following items:

- 1. Binder for Haz Mat Knox Box with:
  - a. List of responsible parties' phone numbers (i.e. plant manager, owner, all principal employees, management types, and major chemical manufacturers).
  - b. An aerial pre-plan of the facility, to include room numbering, extinguishing systems (outside stem and yoke (OSY), post indicator valves (PIV), fire department connections (FDC), drains, secondary containment, ventilation systems, and hydrant locations (See attached aerial pre-plan sample).
  - c. Alphabetical list of chemicals, room number location, and approximate quantity and strength (i.e. 50%, 60%, 85%, etc.).
  - d. Safety Data Sheet (SDS) of all chemicals in alphabetical order.
- 2. Keys for Haz Mat Knox Box:
  - a. Keys to all locked doors with plastic identification tags corresponding to complex aerial pre-plan.
- 3. Location of Haz Mat Knox Box:
  - a. The Knox Box shall be located on the exterior of the building near the front entrance as shown by Fire Code Official or designee.

## (6) <u>Section 506.1.4</u> is added to read as follows:

(a) Section 506.1.4 Knox Rapid Entry System key box contents. The Key boxes shall contain, but not be limited to, the following items as designated by the Fire Code Official or designee.

The Key Box shall contain the following items:

- 1. Labeled keys to locked points of egress, whether in interior or exterior of such buildings
- 2. Labeled Keys to the locked mechanical rooms.
- 3. Labeled keys to any fence or secured areas not covered in Section 506.1 subsection (4), (5), or (6).
- 4. Labeled keys to any other areas that may be required by the Fire Code Official or
- 5. A card containing the emergency contact people and phone numbers for each occupancy.
- 6. Hazardous Safety Data Sheet (SDS).
- 7. Aerial pre-plan.

## (7) <u>Section 506.1.5</u> is added to read as follows:

- (a) Section 506.1.5 Alert Decals. Alert decals approved by the Fire Code Official or designee, to alert fire companies of the presence of security features covered by this ordinance, will be displayed on any outside doors or windows as designated by the Fire Code Official or designee.
- (8) Section 506.2 is amended to read as follows:
  - (a) Section 506.2 Knox Rapid Entry System maintenance. The operator of the building shall immediately notify the Fire Code Official or designee and provide the new key when a lock is changed or re-keyed. The key to such lock shall be secured in the Knox Rapid Entry System.

- F. Amendment of Chapter 9 Fire Protection Systems is amended as follows:
- (1) Section 901.6.2.2 is amended by adding to read as follows:
  - (a) Section 901.6.2.2 Inspection Records. Records of all Inspections, testing and maintenance for all water-based fire suppression systems shall be completed on the forms found in annex B of NFPA 25, California Edition.
- (2) Section 902.1 is amended by adding 902.1-U to read as follows:
  - (a) Section 902.1 Definitions. Undetermined Occupancy. In buildings of undeclared use with floor to structure height greater than 14 feet (356 mm), the fire sprinkler system shall be designed to conform to Extra Hazard Group I design density. In buildings of undeclared use with floor to structure height less than 14 feet (356 mm), the fire sprinkler system shall be designed to conform to Ordinary Group II design density. Where a subsequent occupancy requires a system with greater capability, it shall be the responsibility of the owner and/or the occupant to upgrade the system.
- (3) Section 902.1 is amended by adding 902.1-S to read as follows:
  - (a) Section 902.1 Definitions. Substantial Remodel. In existing buildings, any alteration that causes additional floor area that is more than fifty (50%) percent of the existing floor area and/or where the total floor area exceeds 5,000 square feet.
- (4) Section 903.1 is amended to read as follows:
  - (a) Section 903.1 General. Automatic sprinkler systems shall comply with this section. For the purposes of this section, fire walls shall not be considered as creating separate buildings. An automatic sprinkler system shall be provided for all new buildings with a gross floor area that exceeds 5,000 square feet and in the locations set forth in Section 903.

Exception: Group U occupancies.

- (5) Section 903.2 is adopted in its entirely except as amended below:
  - (a) Section 903.2.1.1 Group A-1. An automatic sprinkler system shall be provided for Group A-1 occupancies where one of the following conditions exists:
    - 1. The fire area exceeds 5,000 square feet.
    - 2. The fire area has an occupant load of 300 or more.
    - The fire area is located on a floor other than a level of exit discharge serving such occupancies.
    - 4. The fire area contains a multi-theater complex.
  - (b) Section 903.2.1.3 Group A-3. An automatic sprinkler system shall be provided for Group A-3 occupancies where one of the following conditions exists:
    - 1. The fire area exceeds 5,000 square feet.
    - 2. The fire area has an occupant load of 300 or more.
    - The fire area is located on a floor other than a level of exit discharge serving such
      occupancies.
    - 4. The structure exceeds 10,000 square feet, contains more than one fire area containing exhibition and display rooms, and is separated into two or more buildings by fire walls of less than 4-hour fire resistance rating without openings.
  - (e) Section 903.2.1.4 Group A-4. An automatic sprinkler system shall be provided for Group A-4 occupancies where one of the following conditions exists:
    - 1. The fire area exceeds 5,000 square feet.
    - 2. The fire area has an occupant load of 300 or more.
    - The fire area is located on a floor other than a level of exit discharge serving such occupancies.

(d) Section 903.2.3 Group E. Except as provided for in Section 903.2.19 for a new public school campus, an automatic sprinkler system shall be provided for Group E occupancies as follows:

1. Throughout all Group E fire areas greater than 5,000 square feet in area.

Throughout every portion of educational buildings below the lowest level of exit discharge serving that portion of the building.

Exception: An automatic sprinkler system is not required in any area below the lowest level of exit discharge serving that area where every classroom throughout the building has at least one exterior exit door at ground level.

In rooms or areas with special hazards such as laboratories, vocational shops and
other such areas where hazardous materials in quantities not exceeding the maximum
allowable quantity are used or stored.

Throughout any Group E structure greater than 10,000 square feet in area, which
contains more than one fire area, and which is separated into two or more buildings
by fire walls of less than 4-hour fire resistance rating without openings.

(e) Section 903.2.4 Group F-1. An automatic sprinkler system shall be provided throughout all buildings containing a Group F-1 occupancy where one of the following conditions exists:

1. A Group F-1 fire area exceeds 5,000 square feet.

- 2. A Group F-1 fire area is located more than three stories above grade plane.
- 3. The combined area of all Group F-1 fire areas on all floors, including any mezzanines, exceeds 10,000 square feet.
- (f) Section 903.2.7 Group M. An automatic sprinkler system shall be provided throughout buildings containing a Group M occupancy where one of the following conditions exists:

1. A Group M fire area exceeds 1,500 square feet.

2. A Group M fire area is located more than three stories above grade plane.

3. The combined area of all Group M fire areas on all floors, including any mezzanines, exceeds 10,000 square feet.

 A Group M occupancy is used for the display and sale of upholstered furniture or mattresses exceeds 1,500 square feet.

- The structure exceeds 10,000 square feet, contains more than one fire area containing a Group M occupancy, and is separated into two or more buildings by fire walls of less than 4-hour fire-resistance rating.
- (g) Section 903.2.8 Group R. An automatic sprinkler system installed in accordance with Section 903.3 shall be provided throughout all Group R occupancies..
- (h) Section 903.2.8.2 Group R-3 Substantial Addition or Expansion. An automatic sprinkler system shall be provided throughout all existing Group R-3 dwellings where a substantial addition or expansion occurs and the new total fire area of the structure exceeds 3,600 square feet.
- (i) Section 903.2.9 Group S-1. An automatic sprinkler system shall be provided throughout all buildings containing a Group S-1 occupancy where one of the following conditions exists:

1. A Group S-1 fire area exceeds 5,000 square feet.

2. A Group S-1 fire area is located more than three stories above grade plane.

 The combined area of all Group S-1 fire areas on all floors, including any mezzanines, exceeds 10,000 square feet.

- A Group S-1 fire area used for the storage of commercial motor vehicles where the fire area exceeds 5,000 square feet.
- A Group S-1 occupancy used for the storage of upholstered furniture or mattresses exceeds 2,500 square feet.

- (j) Section 903.2.9.1 Repair garages. An automatic sprinkler system shall be provided throughout all buildings used as repair garages in accordance with Section 406 of the California Building Code, as shown:
  - Buildings having two or more stories above grade plane, including basements, with a
    fire area containing a repair garage exceeding 5,000 square feet.
  - Buildings no more than one story above grade plane, with a fire area containing a repair garage exceeding 5,000 square feet
  - 3. Buildings with repair garages servicing vehicles parked in basements.
- (k) Section 903.2.10 Group S-2 enclosed parking garages. An automatic sprinkler system shall be provided throughout buildings classified as enclosed parking garages in accordance with Section 406.4 of the California Building Code as follows:
  - 1. Where the fire area of the enclosed parking garage exceeds 5000 square feet; or
  - 2. Where the enclosed parking garage is located beneath other occupancy groups.
- (!) Section 903.2.11.3 Buildings 35 feet or more in height. An automatic fire extinguishing system shall be installed in all occupancies regardless of type of construction, floor area, or occupancy load if the building is three stories or more than 35 feet in height measured in accordance with the California Building Code, Chapter 5.
- (m) Section 903.2.20 Mitigation. An automatic fire extinguishing system installed in accordance to Section 903.3 shall be provided throughout all new buildings located within the Very High Fire Hazard Severity Zone (VHFHSZ) as identified in RMC Section 8.16.080.
- (n) Section 903.2.21 Fire Department Delivery Capability. An automatic fire sprinkler shall be installed in all new buildings and occupancies or in existing buildings or structures that change occupancy classification or use, when the required fire flow exceeds 2,000 gallons per minute or the total floor area exceeds 5,000 square feet.
- (o) Section 903.2.22 Response Times. An automatic fire sprinkler system shall be installed in all new buildings or occupancies which exceed a maximum running time of three minutes or a maximum response time of 5 minutes from the first-due station. Times shall be measured by the most direct route on surface streets.
- (p) Section 903.2.23 Area Separation. For the purpose of this section, buildings separated by fire walls without openings, constructed in accordance with the California Building Code, shall not be considered to create separate buildings.
- (6) Section 903.1.1.3 is added to read as follows.
  - (a) Section 903.3.1.1.3 Undeclared Use. In buildings of undeclared use with floor to structure height greater than 14 feet (356 mm), the fire sprinkler system shall be designed to conform to Extra Hazard Group I design density. In buildings of undeclared use with floor to structure height less than 14 feet (356 mm), the fire sprinkler system shall be designed to conform to Ordinary Group II design density. Where a subsequent occupancy requires a system with greater capability, it shall be the responsibility of the owner and/or the occupant to upgrade the system.
- (7) Section 903.3.9 is amended to read as follows.
  - (a) Section 903.3.9. Floor control valves. Individual floor control valves and waterflow detection assemblies shall be provided for each floor in multi-floor buildings at an approved location.

Exception: Group R-3 and R-3.1 Occupancies

- (8) Section 903.4.2 is amended to read as follows:
  - (a) Section 903.4.2 Alarms. One approved audible and visual device shall be connected to every automatic sprinkler system at an approved location. Such sprinkler water-flow alarm devices shall be activated by water flow equivalent to the flow of a single sprinkler of the smallest orifice size installed in the system. Audible and visual alarm devices shall be provided on the exterior of the building in an approved location. Where a fire alarm system is installed, actuation of the automatic sprinkler system shall actuate the building fire alarm system.
- (9) Section 903.6 is amended by adding subsections 903.6.1 and 903.6.2 to read as follows:
  - (a) Section 903.6.1 Substantial Addition or Expansion. An automatic sprinkler system shall be provided throughout all existing buildings where a substantial addition or expansion occurs and the total fire area of the structure exceeds 5,000 square feet. Group R-3 substantial additions or expansions shall comply with Section 903.2.8.2.
  - (b) Section 903.6.2 Change of occupancy classification. Any existing building that undergoes a change of occupancy classification into a higher hazard category shall comply with the requirements of Section 903.2. Relative hazard categories of occupancy groups shall be established based upon the Heights and Areas Hazard Categories of Table 1012.4 of the 2012 edition of the International Existing Building Code, as published by the International Code Council. The requirements of Section 903.2 shall not be required when a change of occupancy classification is made to an equal or lesser hazard category. Group L occupancies shall be considered a relative hazard of 1 (highest hazard). R-3.1 occupancies shall be considered a relative hazard of 4 (lowest hazard).
- (10) Section 905.3.1 subsection (2) is amended in its entirety to read as follows.
  - (a) Section 905.3.1 Height subsection (2). Any building three (3) stories in height shall have a Class I standpipe installed that is interconnected with the fire sprinkler system.
- (11) Section 907.4.2.3 is adopted in its entirety.
- (12) Section 907.4.4 is added to read as follows:
  - (a) Section 907.4.4 Monitoring of other fire systems. In buildings equipped with a fire alarm system or sprinkler alarm and supervisory service (SASS) system, where other fire suppression or extinguishing systems are installed in the building (including but not limited to commercial kitchen suppression systems, pre-action fire suppression systems, dry chemical systems, and clean agent systems), these other suppression systems shall be monitored by the SASS dedicated function fire alarm system and transmitted as a specific signal to the Central Station. The system shall be monitored in compliance with Section 907.6.6.
- (13) Section 907.5.2.3.1 is amended to read as follows:
  - (a) Section 907.5.2.3.1 Public and common areas. Visible alarm notification appliances shall be provided in public use areas and common use areas, including but not limited to:
    - Sanitary facilities including restrooms, bathrooms, shower rooms and locker rooms.
    - Corridors, hallways, aisles with shelving and/or fixtures obstructing the required light intensity for that area.
    - 3. Music practice rooms.
    - 4. Band rooms.
    - 5. Gymnasiums.
    - 6. Multipurpose rooms.
    - 7. Occupational shops.
    - 8. Occupied rooms where ambient noise impairs hearing of the fire alarm.
    - 9. Lobbies
    - 10. Meeting/Conference rooms.
    - 11. Classrooms.

- 12. Medical exam rooms.
- 13. Open office areas.
- 14. Sales floor areas.
- 15. Break or lunch rooms
- 16. Copy or work rooms.
- 17. Computer server rooms exceeding 200 sq. ft.
- 18. File or storage rooms exceeding 200 sq. ft.
- (14) Section 907.6.6 is amended to read as follows:
  - (a) 907.6.6 Monitoring of fire alarm systems. A fire alarm system required by this chapter, or by the California Building Code, shall be monitored by a UL-listed Central Station service in accordance with NFPA 72 and this code.

Exception: Monitoring by a UL listed central station is not required for:

- 1. Single and multiple station smoke alarms required by section 907.2.11.
- 2. Group I-3 occupancies shall be monitored in accordance with section 907.2.6.3.
- 3. Residential Day Care Facilities (occupancy load of 14 or less).
- 4. One and two family dwellings.
- 5. Residential care facilities licensed by the state with an occupant load of 6 or less.
- Occupancies with a local fire alarm system that will give an audible and visible signal at a constantly attended location, as approved by the Fire Code Official.
- (15) Section 907.8.5.1 is added to read as follows:
  - (a) Section 907.8.5.1 Certification. New fire alarm systems shall be UL-Certified. A Certificate of Completion and other documentation as listed in NFPA 72 shall be provided for all new fire alarm system installations. It is the responsibility of the building owner or owner's representative to obtain and maintain a current and valid certificate.
- (16) Section 907.8.5.5.1.2 is added to read as follows:
  - (a) Section 907.8.5.1.2 Posting of Certificate. The UL certificate shall be posted in a durable transparent cover within 3 feet of the fire alarm control panel within 45 days of the final acceptance test/inspection.
- G. Amendment of Chapter 10 Means Of Egress is amended as follows:
- (1) Section 1028.6 is amended by adding a new subsection 1028.6.1 to read as follows:
  - (a) Section 1028.6.1 Exit discharge surface. Exterior exit pathway surfaces including permeable materials, shall be suitable for pedestrian use in inclement weather, and shall terminate at a public way as defined in the California Building Code.
- (2) Amendment of Section 1031.7 is amended by adding subsection 1030.7 (a).
  - (a) Section 1031.7 (a) Application. The regulations herein referenced shall also apply to any Group R occupancy in existence prior to July 1, 1997.
- H. Amendment of Chapter 23 Motor Fuel-Dispensing Facilities & Repair Garages is amended as follows:
- (1) Section 2306.2.4.2 is amended to read as follows:

- (a) Section 2306.2.4.2 Fleet vehicle motor fuel-dispensing facilities. Aboveground Tanks.

  Class I and II and IIIA liquids may be dispensed from approved protected aboveground tanks into the fuel tanks of motor vehicles, watercraft or aircraft when installed and maintained as required by the Fire Chief and in accordance with Richmond Municipal Code Section 8.16.040.
  - Location. Upon approval of the Fire Chief, protected aboveground tanks may be
    located at farms, construction sites, gravel pits, industrial occupancies, corporation
    yards, other remote locations or in areas where the approved installation of
    underground tanks is not feasible due to soil conditions, flood plain areas, high water
    table or environmentally sensitive areas.
  - Capacity. Vaulted tanks shall not exceed 2,000 gallon capacity unless approved by the Fire Chief.
  - 3. Removal. The Fire Chief shall have the sole discretion to prohibit use of vaulted tanks based on the safety of the public. Removal of vaulted tanks may be required at any time for violation of these requirements, any associated permit requirements or a change in conditions.
- I. <u>Amendment of Chapter 33 Fire Safety during Construction & Demolition is amended as follows:</u>
- (1) Section 3301.3 is added to read as follows:
  - (a) 3301.3 Permits. Permits shall be obtained for asbestos removal operations, temporary fixe department access roads for construction, and temporary water supplies as set forth in sections 105.6 and 105.7.
- (2) Section 3318 Asbestos Removal is added to read as follows:
  - (a) 3318.1 General. Operations involving removal of asbestos or asbestos-containing materials from buildings shall be in accordance with Section 3318.

Exception: Section 3318 does not apply to the removal of asbestos from:

- 1. Pumps, valves, gaskets and similar equipment.
- 2. Pipes, ducts, girders or beams that have a length less than 21 linear feet (6400 mm).
- 3. Wall or ceiling panels that have an area of less than 10 square feet (0.93 m²) or a dimension of less than 10 linear feet (3048 mm).
- 4. Floor tiles when their removal can be completed in less than four hours.
- 5. Group R-3 occupancies.
- (b) 3318.2 Notification. The fire code official shall be notified 24 hours prior to the commencement and closure of asbestos-removal operations. The permit applicant shall notify the building official when asbestos abatement involves the removal of materials that were used as a feature of the building's fire resistance.
- (c) 3318.3 Plastic Film. Plastic film that is installed on building elements shall be flame resistant as required for combustible decorative material, in accordance with Section 807.
- (d) 3318.4 Signs. Approved signs shall be posted at the entrance, exit and exit-access door, decontamination areas and waste disposal areas for asbestos-removal operations. The signs shall state that asbestos is being removed from the area, that asbestos is a suspected carcinogen, and that proper respiratory protection is required. Signs shall have a reflective surface. Lettering shall be a minimum of 2 inches (51 mm) high.
- J. Amendment of Chapter 50 Hazardous Materials General Provisions is amended as follows:
- (1) Section 5001.1.2 is added to read as follows:

- (a) Section 5001.1.2 Research & Development Laboratory. The design, installation, and operation of Research and Development Laboratory systems including reaction set-ups are exempt from the design and installation requirements for equipment provided that the Laboratory is constructed and managed in accordance with nationally recognized standards including but not limited to:
  - Is under the supervision of a technically competent individual approved by the fire code official.
  - 2. Adheres to prudent or good laboratory practices; and
  - Uses volumes of chemicals that are usually associated with Research and Development operations.
- (2) Section 5001.5.1 item number ten (10) is added to read as follows:
  - (a) Section 5001.5.1 Hazardous Material Management Plan (HMMP). Where required by the fire code official, an application for permit shall include an HMMP and aerial pre-plan. The HMMP shall include, an aerial pre-plan of the facility to include, but not be limited by the following:
    - 10. Fire Department related safety equipment
      - a. Fire alarm control panel (FACP)
      - b. Sprinkler riser
      - c. Fire department connection (FDC)
      - d. Knox Box location
      - e. Gas valve shutoff
      - f. Electrical main shutoff
      - g. Water shutoff
      - h. Elevator equipment room
- (3) Section 5003.9.1 is amended by adding subsection 5003.9.1.2 to read as follows:
  - (a) 5003.9.1.2 Documentation. Evidence of compliance with provisions of this chapter as well as with state and federal hazardous material regulations shall be maintained on-site and available for inspection by fire department personnel.
- K. Amendment of Chapter 56 Explosives & Fireworks is amended as follows:
- (1) Section 5601 is amended to add Sections 5601.2, 5601.3, 5601.4 and 5601.5, to read as follows:
  - (a) Section 5601.2 Fireworks. The possession, manufacture, storage, sale, handling and use of fireworks are prohibited. The possession, manufacture, storage, sale, handling and use of fireworks or pyrotechnic materials within the jurisdiction of the City of Richmond are prohibited.

## **Exceptions:**

- Fireworks may be temporarily stored only if they are aerial or theatrical piece fireworks stored in conjunction with an approved and permitted aerial or set display.
- Snap Caps and Party Poppers classified by the State Fire Marshal as pyrotechnic devices.
- (b) Section 5601.5 Sale and retail display. The possession, manufacture, storage, sale, handling and use of fireworks or pyrotechnic materials are prohibited within the jurisdiction of the City of Richmond.
  - Exception: Fireworks in accordance with California Code of Regulations, Title 19, Division 1, Chapter 6, see Section 5608.
- (2) Section 5608 is amended by adding Sections 5608.2 and 5608.3 to read as follows:
  - (a) Section 5608.2 Permit required. A permit is required to conduct an aerial display in accordance with California Code of Regulations, Title 19, Chapter 6. (See Chapter 1, Section 105.6.52.)

Exception: Fireworks in accordance with California Code of Regulations, Title 19, Division 1, Chapter 6, see Section 5608.

- (b) Section 5608.3 Financial responsibility. Before a permit is issued pursuant to Section 5608.2, the applicant shall file with the jurisdiction a corporate surety bond in the principal sum of \$1,000,000 or a public liability insurance policy for the same amount, for the purpose of the payment of all damages to persons or property which arise from, or are caused by, the conduct of any act authorized by the permit upon which any judicial judgment results. The fire code official is authorized to specify a greater or lesser amount when, in his or her opinion, conditions at the location of use indicate a greater or lesser amount is required. Government entities shall be exempt from this bond requirement.
- L. Amendment of Chapter 57 Flammable & Combustible Liquids is amended as follows:
- (1) Section 5704.2.9.6.1 is amended to read as follows:
  - (a) Section 5704.2.9.6.1 Locations where above-ground tanks are prohibited. The storage of Class I and II liquids in above-ground tanks outside of buildings is prohibited in all zoning districts except districts zoned for commercial, industrial, or agricultural uses.

Exception: Protected above-ground tanks for the purpose of emergency power generator installations in areas zoned commercial, industrial, agricultural, business district, rural or rural residential, and for facilities on an individual basis consistent with the intent of this provision. Tank size shall not exceed 500 gallons (1892.706L) for Class I or II liquids, or 1,000 gallons (3785.412L) for Class III liquids.

- (2) <u>Section 5704.2.13.1.3</u> is amended to read as follows:
  - (a) Section 5704.2.13.1.3. Out of service for one (1) year. Underground tanks that have been out of service for a period of one year shall be removed from the ground in accordance with Section 5702.14 or as required by the Fire Code Official or designee.
- (3) Section 5706.2.4.4 is amended to read:
- Section 5706.2.4.4 Locations where above-ground tanks are prohibited. Storage of Class I and II liquids in above-ground tanks is prohibited in all zoning districts except district zoned for commercial, industrial, or agricultural use.M. <u>Amendment of Chapter 58 Flammable Gases & Flammable Cryogenic Fluids is amended as follows:</u>
- (1) Section 5806.2 is amended to read as follows:
  - (a) Section 5806.2 Limitation. The storage of flammable cryogenic fluids in stationary containers outside of buildings is prohibited in any area which is zoned for other than industrial use.

Exception: Liquid hydrogen fuel systems in compliance with section 5806.3 or 5806.4

- N. Amendment of Chapter 61 Liquefied Petroleum Gases is amended to read as follows:
- (1) Section 6103.2.1.7. Section 6103.2.1.7 is amended in its entirety to read:
  - (a) Section 6103.2.1.7 Use for food preparation. Individual portable containers used, stored, or handled inside of buildings used for assembly or business for the purposes of cooking, display, or similar use shall be limited in size to one quart capacity and shall be of an approved type. The number of portable containers permitted will be at the discretion of the Fire Chief or said Fire Chief's authorized representative, but shall not exceed 15 total pounds per NFPA 58.
- (2) Section 6104.2 is amended to read as follows:
  - (a) Section 6104.2 Maximum capacity within established limits. The storage of liquefied petroleum gas is prohibited in any business district and in all zoning districts except districts zoned for commercial, industrial, rural, or agricultural uses. The aggregate

capacity of any one installation used for the storage of liquefied petroleum gas shall not exceed a water capacity of 2,000 gallons (7570 L).

- (3) Section 6104.3.2 is amended by adding the following after the last sentence:
  - (a) Section 6104.3.2 Special Hazards. LP-gas shall not be stored or used inside of any occupancy, tent or air-supported structure unless approved by the Fire Code Official or designee.
- O. Amendment of Appendices. Appendices are amended to read as follows:
- (1) Appendix B. Fire-Flow Requirements for Buildings.
  - (a) Section B105.2, exception 1, is amended to read as follows:

Exception 1: A reduction in required fire-flow of 50 percent, as approved by the fire code official, when the building is provided with an approved automatic sprinkler system and installed in accordance with Section 903.3.1.1. The resulting fire-flow shall be not less than 1,500 gallons per minute (5678L/min) for the prescribed duration as specified in Table B105.1 (2).

- (2) Appendix C. Fire Hydrant Locations and Distribution.
  - (a) Table C105.1 footnotes h and i are added to read as follows:
    - h. A fire hydrant shall be provided within 250 feet of a fire trail access point off a public or private street.
    - For infill projects within existing single-family residential developments, Section 507.5.1 applies.
- Appendix D. Fire Apparatus Access Roads.
  - (a) Section D102.1 is amended to read as follows:
    - 1. D102.1 Access and loading. Facilities, buildings or portions of buildings hereafter constructed shall be accessible to fire department apparatus by way of an approved fire apparatus access road with an asphalt, concrete or other approved all-weather driving surface capable of supporting the imposed load of fire apparatus weighing at least 74,000 pounds (33 566 kg) in accordance with Caltrans Design Standard HS-20-44.

Exception: Driveways serving one or two single-family dwellings may be constructed of an alternate surface material, providing the imposed weight load design minimums are met and the grade does not exceed 10 percent.

- (b) Section D103.1 is deleted in its entirety.
- (c) Section D103.2 is deleted in its entirety and replaced by the following, to read as follows:
  - 1. D103.2 Grade. Fire department access roadways having a grade of between 16 percent and 20 percent shall be designed to have a finished surface of grooved concrete sufficient to hold a 45,000 pound (19 958 kg) traction load. The grooves in the concrete surface shall be ½ inch (13 mm) wide by ½ inch (13 mm) deep and 1 ½ inch (38 mm) on center and set at a 30 to 45 degree angle across the width of the roadway surface. No grade shall exceed 20 percent, nor shall the cross slope exceed 8%, unless authorized in writing by the fire code official.
- (d) Section D103.2.1 is added to read as follows:
  - D103.2.1 Angles of approach and departure. The angles of approach and departure for any means of access shall not exceed 10 percent at 10 feet of the grade break.

(e) Section D103.3 is deleted in its entirety and replaced by the following, to read:

**D103.3 Turning radius.** Based on a minimum unobstructed width of 20 feet, a fire apparatus access roadway shall be capable of providing a minimum standard turning radius of 25 feet (7620 mm) inside and 45 feet (13 716 mm) outside.

- (4) Appendix J. Building Information Sign.
  - (a) Section J101.1.2. is amended to read as follows:

J101.1.2 Sign features. Either temporary or permanently affixed to the building or structure in an approved manner specified by fire code official.

(b) Section J101.1.3.1. is amended to read as follows:

J101.1.3.1 Sign shape. Buildings that require a fire department inspection shall have an approved fire code official sign designating a completed fire inspection in the shape of a rectangle.

(c) Section J101.1.4.1. is amended to read as follows:

J101.1.4.1. Fire inspection sign size and lettering. The minimum size of the fire inspection information sign and lettering shall be designated by the fire code official on an annual basis.

## 8.16.050 New materials, processes or occupancies which may require permits.

The Fire Prevention Division shall determine and specify, after giving affected persons an opportunity to be heard, any new materials, processes or occupancies, which shall require permits, in addition to those now enumerated in this Code. The Fire Code Official shall post such list in a conspicuous place in his office, and distribute copies thereof to interested persons.

#### 8.16.060 Fire hazards and nuisances - Abatement.

- (a) All violations of this chapter are fire hazards and public nuisances and shall be abated.
- (b) General Abatement.
  - (1) When a fire hazard and nuisance as generally described in Section 8.16.010 through 8.16.050 above; as described in Section 8.16.070 and 8.16.090 below; or as in Section 109 of the California Fire Code exists, it shall be the duty of the Fire Chief or designee to notify in writing the owner or occupant of such premises to abolish and abate such nuisance and, if necessary, remove said matter provided that such notification shall not be required in a situation which, in the Fire Chief or designee judgment, constitutes an emergency requiring immediate abatement of such nuisance. In such an emergency situation, the Fire Chief or designee may order the owner or occupant, orally or in writing, to abate the nuisance immediately or may proceed to cause the nuisance to be abated without any such notice if, in the Fire Chief or designee's judgment, the situation warrants such action in the interest of the public health, safety or welfare.
  - (2) The required notice shall provide a specified time in which such nuisance must be abated or removed.
  - (3) Before complying with the requirements of the required notice, the owner may request a hearing before the Fire Chief or designee at a time and place fixed by the Fire Chief or designee. The hearing request must be made in writing and must be made within the time limit specified in the required notice.

- (4) The Fire Chief or designee shall:
  - (a) Conduct the hearing;
  - (b) Re-determine whether or not a nuisance as described in subsection (a) hereof exists and whether or not the owner or occupant shall abate the nuisance; and
  - (c) Specify the time within which the work shall be completed.
- (5) In the event the nuisance is not abated within the time specified in the original required notice and/or the time specified at the hearing, the City may abate such a nuisance.
- (6) The person whose duty it was to abate or abolish a nuisance as ordered by the Fire Chief or designee pursuant to this chapter, in addition to incurring penalties as provided in these regulations, shall become indebted to the City of Richmond for the damages; costs and charges incurred by the City by reason of the existence of said muisance or removal of said matter. This cost may become a lien upon the property upon which the nuisance existed.
- (c) Those properties which are deemed public nuisances because of the presence of weeds (as weeds are defined in Chapter 9.50 of this Municipal Code), dry grass, stubble, brush, rubbish, litter or other combustible or flammable material which creates a fire hazard, a menace to the public health or which is otherwise noxious or dangerous shall be subject to the abatement procedures set forth in Sections 9.22.100, 9.22.110 and 9.22.120 of the City of Richmond Municipal Code.
- (d) <u>Firebreaks</u>. In lieu of ordering the abatement of fire hazards as provided in this Section, the Fire Chief or designee may order the preparation of firebreaks around parcels of property when combustible weeds, crops, or brush are present. In determining the proper width for firebreaks, the Fire Chief or designee shall consider the height of the growth, weather conditions, topography, and the accessibility to the property of fire protection equipment. The procedure set forth in subsection (b) above shall also apply to the preparation of firebreaks.
- (e) <u>Alternate Procedures</u>. The procedures provided for by this section are an alternative to any other procedure adopted by the City Council for the abatement of public nuisances, or any procedure which may be authorized by the laws of the State of California.

## 8.16.065. Emergency response cost recovery fee

#### (a) Findings.

- The City Council finds and determines that the Richmond Fire Department is authorized
  to provide any service relating to the protection of lives and preservation of property
  including, but not limited to, fire protections services, rescue services, emergency medical
  services, hazardous material emergency response services, and other emergency response
  services.
- The City Council finds and determines that these emergency responses by the Richmond Fire Department sometimes generate additional unanticipated operational services provided by the department are an increased cost to the City of Richmond.
- 3. The City Council finds that the Richmond Fire Department may charge a fee to recover the reasonable costs of services necessary to protect the public health and safety associated with motor vehicle incidents, hazardous materials spills, discharges or threatened discharge of hazardous (or suspected hazardous) materials, motor vehicle fires, motor vehicle extrications, pipeline or power line incidents (Pacific Gas & Electric), and origin and cause investigations.

## (1) Fees for recovery of emergency response.

(a) The City of Richmond shall charge reasonable fees for the cost of services necessary to protect the public health that the Richmond Fire Department provides related to motor vehicle incidents, hazardous materials spills, discharges or threatened discharge of hazardous (or suspected hazardous) materials, motor vehicle fires, motor vehicle extrications, pipeline or power line incidents (Pacific Gas & Electric), and origin and cause investigations. The fees shall not exceed the reasonable cost to provide such services and shall be charged according to the fees set in the Fire Prevention Services Division fee schedule. A motor vehicle incident, for the purposes of this section, means any matter involving an emergency response to a motor vehicle, including, but not limited to, collisions, accidents, fire, extrication and investigation.

## (2) Adoption of fee schedule for recovery of emergency response costs.

(a) The City of Richmond adopts the fee schedule set forth in Exhibit A. The City Council may amend, as needed, the schedule of fees in Exhibit A by resolution.

#### (3) Persons subject to fee.

(a) The fees shall be billed, as determined by the Fire Chief, his or her designee or third party billing service, to any person or persons whose negligent or willful act is a cause of any motor vehicle incidents, motor vehicle fires, motor vehicle extrications, hazardous materials spills or discharges, pipeline or power line incidents (Pacific Gas & Electric), and origin & cause investigations. Fees for motor vehicle incidents shall not be billed to residents of the City of Richmond. Fees shall be billed to the responsible party regardless of fault or residency (with the exception of Richmond residents), as determined by the Fire Chief, his designee or third party billing service.

#### 8.16.070 Smoke and carbon monoxide detectors.

#### (a) Requirements.

(1) Every floor of every dwelling unit in an apartment house, motel, hotel, or lodging house shall be provided with smoke and carbon monoxide detectors(when fossil fuel appliances are located inside or duct system enters inside the dwelling unit).

(2) Every dwelling unit in a single family dwelling, duplex, or residential occupancy not listed in subsection (1) above shall be provided with smoke and carbon monoxide detectors. Each smoke and carbon monoxide detector provided or installed pursuant to this section shall conform to the requirements of the 2016 California Building Code. Each smoke and carbon monoxide detector shall also be maintained as set forth herein.

(b) Fixtures. Every smoke and carbon monoxide detector required under this section shall be deemed to be a fixture for purposes of transfer of title.

#### (c) Maintenance.

- (1) Every smoke and carbon monoxide detector required under this section shall be maintained in operable condition.
- (2) Nothing in this section shall preclude a rental or lease agreement from providing that a tenant has the responsibility for repair or maintenance of the smoke and carbon monoxide detector(s). However, such provision notwithstanding, the owner shall be responsible for ensuring compliance with this section.
- (d) Holder of Certificate of Occupancy. Where the holder of a Certificate of occupancy, as provided in Chapter 6.02.40 of the Richmond Municipal Code and Section 15.04.210 of this Municipal Code, is some person other than the owner of the real property, such person shall be deemed to be an owner for purposes of this section.
- (e) Notice. Every property owner or owner's authorized agent offering to rent, lease or let residential property shall give notice of the requirements of this section to the tenant prior to occupancy. The giving of such notice shall not relieve the property owner from compliance with the requirements of this Section.
- (f) Liability. Nothing in the provisions of this section shall be construed to require the City, its officers, employees or representatives to conduct any inspection of the smoke detectors

herein required nor shall any actual inspections made imply a duty to inspect other detectors. Furthermore, this section shall not be construed to hold the City or any officer, employee or representative of the City responsible for any damage to persons or property by reason of making or not making inspection or by reason of any failure to make an inspection or re-inspection.

(g) Penalty. Any person who violates any provision of this section shall be guilty of a misdemeanor.

### 8.16.080 Very High Fire Hazard Severity Zones

## (a) Very High Fire Hazard Severity Zone Regulations

- (1) Purpose. The purpose of the very high fire hazard severity zone ("VHFHSZ") regulations is to minimize danger to public health and safety caused by building in an area with a high risk of grass and brush fire.
- (2) Applicability. The VHFHSZ regulations apply to any area of the city which is designated as a very high fire hazard severity zone. For purposes of this subsection, VHFHSZ shall be those shown on that certain map entitled Exhibit A Very High Fire Hazard Severity Zones and dated September 1995 which has been prepared by, and is on file in the office of, the Fire Chief. Exhibit A also constitutes the official designation of the hazardous fire areas within the City of Richmond.
- (3) Regulations. Within the very high fire hazard severity zones established by this Section, all new roads, new buildings, other new structural improvements, and existing structures shall be subject to the following regulations:
  - (a) All buildings shall be designed and sighted so that the roof and other areas may be kept free of leaves, needles and other dead vegetative growth.
  - (b) All new buildings shall have a Class B roofing tested in accordance with ASTM E108 or UL 790. In addition, fire-retardant-treated wood roof coverings shall be tested in accordance with ASTM D2898, as adopted in the California Building Code. Every existing building, when 50 percent or more of the total roof area is re-roofed within any one year period, shall have a fire retardant roof covering that is at least Class B as defined in the California Building Code. The installer of the roof covering shall provide certification of the roof covering classification to the building owner and, when requested, to the City Building Official.
  - (c) Wood shingles or wood shakes shall not be used for exterior wall covering.
  - (d) All buildings shall have the underside of balconies, unenclosed roofs and floors, and other similar horizontal surfaces protected by at least one-hour fire-resistive construction as required by the Fire Chief. Combustible eaves shall be protected as approved by the Fire Chief.
  - (e) Unprotected vertical or horizontal wood supports for stilt type or cantilevered buildings shall be of not less than five and one-half inches in the least dimension.
  - (f) All openings into the interior of a building for ventilation purposes shall be protected by non-corrosive metallic screening having a mesh no larger than one-quarter inch.
  - (g) Access openings to under-floor areas shall be protected by either non-corrosive metallic screening having a mesh no larger than one-quarter inch or by a three-quarter inch solid wood door or equivalent.
  - (h) When difficulty of access or topography occurs, or structures do not meet fire flow requirements, or the fire department response time is six minutes or more, the Fire Chief may require other fire mitigation measures as for all occupancies.

# (b) Vegetation management standards in Very High Fire Hazard Severity Zones

Any person who owns, leases, controls, operates, or maintains any property in a very high fire hazard severity zone shall maintain such property in conformance with the vegetation maintenance standards established by the City Council by Resolution 192-95, or said resolution's successor. Copies of Resolution 192-95 and any successor resolution shall be maintained by and be available in the City Clerk's Office.

## (c) Violations and penalties

Any violation of this section shall constitute an infraction punishable by the policies, enforcement procedures and fines established by RMC Chapter 2.62 Administrative Citations.

#### (d) Public nuisance

Any violation of this section shall constitute a public nuisance which may be abated, and abatement costs shall be recovered in the manner provided in RMC Sections 9.22.100, 9.22.110, and 9.22.120.

#### (e) Firebreaks

In lieu of ordering the abatement of fire hazards as provided in this Section, the Fire Chief may order the preparation of firebreaks around parcels of property when combustible weeds, crops, or brush are present. In determining the proper width for firebreaks, the Fire Chief or designee shall consider the height of the growth, weather conditions, topography, and the accessibility to the property of fire protection equipment. The procedure set forth in subsection (d) above shall also apply to the preparation of firebreaks.

## (f) Alternate Procedures

The procedures provided for by this section are an alternative to any other procedure adopted by the City Council for the abatement of public nuisances, or any procedure which may be authorized by the laws of the State of California.

#### 8.16.090 False Fire Alarms.

#### 1. Purpose

The purpose of this section is to promote the responsible use of fire alarm systems, to set forth additional standards to improve the reliability of these systems, and to establish procedures for assessing fee penalties for excessive false fire alarm responses in violation of this ordinance.

#### 2. Findings

The City Council finds and determines that fire alarm systems not properly installed, maintained and/or operated create a nuisance to the peace and safety of the community. Such alarm systems cause excessive and unnecessary use of fire services in responding to assumed emergencies which results in a significant expenditure and increased costs to the public.

#### 3. Definitions

Alarm business is defined as any business which is engaged in the selling, leasing, maintaining, servicing, repairing, altering, replacing, moving or installing any alarm system in or on any building, place or premises.

Alarm user is defined as any person using an alarm system at such person's residence or place of business.

Audible alarm system is defined as an alarm system which when activated generates sound perceptible from the exterior of the building structure or facility in which the alarm system is located. Audible alarm systems may or may not be monitored by a central alarm system.

Central Station is defined as a supervising station that is listed for central station service.

Central Station Service is defined as the use of a system or a group of systems in which the operations of circuits and devices at a protected property are signaled to, recorded in, and supervised from a listed central station having competent and experienced operators who, upon receipt of a signal, take appropriate action as required. Central station service is controlled and operated by a person, firm, or corporation whose business is the furnishing of such contracted services or whose properties are the protected premises.

Central Station Fire Alarm System is defined as a system or group of systems in which the operations of circuits and devices are transmitted automatically to, recorded in, maintained by, and supervised from a listed central station having competent and experienced servers and operators who, upon receipt of a signal, take such action as required by NFPA 72.

Certificate of Completion is defined as a document that acknowledges the features of installation, operation (performance), service, and equipment with representation by the property owner, system installer, system supplier, service organization, and the authority having jurisdiction.

Certification is defined as a systematic program using randomly selected follow-up inspections of the certified systems installed under the UL Fire Alarm Certificate Program, which allows the listing organization (Underwriters Laboratories) to verify that a fire alarm system complies with all of the requirements of NFPA 72. A system installed under such a program is identified by the issuance of a UL certificate and is designated as a UL certified system.

City is defined as the City of Richmond

Emergency is defined as an occasion that reasonably calls for a response by the fire department. A response due to failure of the alarm system, personnel error in transmission or reporting of an alarm, or repair or maintenance of an alarm system is not an emergency.

False Alarm is defined as the activation of an alarm system necessitating a response by the Richmond Fire Department where an emergency does not exist; provided however, that activation of alarms by natural disaster will not be considered false alarms.

Fire Alarm System is defined as a system or a portion of a combination system consisting of components and circuits arranged to monitor and annunciate the status of fire alarm or supervisory signal initiating devices and to initiate the appropriate response to those signals.

Fire Chief, wherever the words "Fire Chief" are used in this section, they mean Fire Chief of the City of Richmond, or said Fire Chief's authorized representative. The term "Chief" also means Fire Chief.

Local alarm system is defined as an alarm system which is annunciated only on the premises and not intended to cause a request for emergency response.

Monitored is defined as an alarm system that is both designed to communicate with a UL central alarm station protection system and is currently being provided with that service.

Nuisance Alarm System Is the activation of any fire protection or alarm system which results in the response of the Richmond Fire Department and is caused by malfunction, improper maintenance, negligence, or misuse, of the system by an owner, occupant, employee, or agent, or any other activation not caused by excessive heat, smoke, fire, or similar activating event.

Subscriber is defined as a person who has contracted with an alarm business for the monitoring services for a central alarm station protection system.

#### 4. Fire Alarm Standards

- a. All fire alarm systems and appurtenant equipment installed or used within the city of Richmond shall meet or exceed industry standards and those standards established under the Richmond Fire Prevention Code.
- b. Certification Required: All fire alarm system installations shall have UL certification

and a UL certificate of completion issued indicating that the system meets the standards of the laboratory and that it was installed in accordance with the approved plans and specifications. The certificate shall be requested and obtained by a company that is on a list of UL approved vendors maintained by the Fire Department. The property owner shall continue the UL certificate at all times.

5. Testing Fire Alarms

Persons shall notify the Richmond Fire Department through the Fire Dispatch Communications Center prior to any service, test, repair, maintenance, adjustment, alterations, or installations of automatic fire sprinkler or fire alarm, which might normally result in an emergency response. Any alarm activated where such prior notice has been given shall not constitute a false alarm for the purpose of this section.

6. False Fire Alarms

- a. Multiple Occurrences Unrelated to Testing. The maximum number of allowable false alarms shall be no more than one (1) in a six month period from January 1<sup>st</sup> through June 30<sup>th</sup> and no more than one (1) in the six-month period from July 1<sup>st</sup> through December 31<sup>st</sup>, before an alarm subscriber/owner is assessed false alarm service assessment fees in accordance with item 7 (False Fire Alarm Fees).
- b. Occurrences Related to Improperly Noticed Testing. Persons or businesses engaged in servicing, testing, repairing, maintaining, adjusting, altering or installing and automatic fire sprinkler system or fire alarm system shall be subject to such assessment as may be established by ordinance for false alarms on any occurrence of a false alarm resulting from the failure to provide notice of testing as required by section 5 above.

7. False Fire Alarm Fees

- The initial false alarm in the six-month period from January 1<sup>st</sup> through June 30<sup>th</sup>
  and the initial false alarm in the six-month period from July 1<sup>st</sup> through December
  31<sup>st</sup>: No Fee.
- After receiving notice of initial false alarm (no fee), the subsequent first false alarm in the six-month period from January 1<sup>st</sup> through June 30<sup>th</sup> and first false alarm in the six-month period from July 1<sup>st</sup> through December 31<sup>st</sup>: \$261.00
- After receiving notice of first false alarm (\$261 fee), the second false alarm in the six-month period from January 1<sup>st</sup> through June 30<sup>th</sup> and the second false alarm in the six-month period from July 1<sup>st</sup> through December 31<sup>st</sup>: \$522.00
- 4. After receiving notice of second false alarm (\$522 fee), the third or more false alarm in the six-month period from January 1<sup>st</sup> through June 30<sup>th</sup> and the third or more false alarm in the six-month period from July 1<sup>st</sup> through December 21<sup>st</sup>: \$1,044.00

8. Nuisance Fire Alarm Systems

- a. An alarm system may be declared a nuisance alarm system by the Fire Chief under any one of the following:
  - (1) More than five (5) false alarms not exempt under section 9 were generated and not canceled in a false alarm period (six months).
- b. The Fire Chief or designee shall notify the alarm user, in the same manner as for the imposition of false alarm fees, of the determination that the alarm system is a nuisance alarm system.
- c. Nuisance fire alarm systems shall be referred to Underwriters Laboratory Inc. (UL) or representing alarm business for a re-qualification audit or be retroactively placed in a UL Fire Alarm Certification program as required by the Fire Chief or designee.
- d. The determination that an alarm system is a muisance may be revoked by the Fire Chief upon finding proof that the cause of the excessive false alarm or audible disturbance has been remedied.

#### 9. Exempt From False Alarm Fees

False alarms reported to the Richmond Fire Department shall not be counted for the imposition of false alarm fees under the following conditions:

- a. The Fire Chief has granted an exemption, based upon verifiable proof that the alarm user is taking all reasonable measures to eliminate the cause of false alarms. A request for exemption must be made in writing and will be determined on a case-by case-basis.
- b. False alarms reported to the Richmond Fire Department, but subsequently cancelled prior to department units starting actual response. If at the discretion of the department, a response is continued after a valid cancellation is received prior to commencement of a response, the response will not be counted as a false alarm for the purpose of imposing a false alarm fee.

## 10. Procedure For Imposition Of False Alarm Fees

- a. Notice of Imposition. The Fire Chief or designee shall deliver to the alarm user at the address where the false alarms originate a notice of the imposition of false alarm fees. The notice shall specify the date, time and nature of the events which are the basis for the imposition of false alarm fees. The notice shall state that the alarm user has the right to request a hearing before a Hearing Officer as established pursuant to Administrative Citations, Section 2.62 of the Richmond Municipal Code by submitting a written request to the Fire Chief within 14 days of notification. The appeal must be in writing and set forth the basis of the appeal.
- b. Collection of fees. Collection of fees shall be as described in 2.62.120 or 9.22.110, including a lien against the real property on which the false alarm occurred. In the event of the failure of any person to pay the fees assessed pursuant to the provisions of this section, the city of Richmond may institute an action in any court of competent jurisdiction to collect any charges, together with interest, which may be due and payable and all administrative costs of collection in the same manner as any other debt owing to the city may be collected.

#### SECTION IL. SEVERABILITY CLAUSE

If any section, subsection, subdivision, paragraph, sentence, clause or phrase of this ordinance is for any reason held to be unconstitutional or invalid, such a decision shall not affect the validity of the remaining portions of this ordinance. The City council hereby declares that it would have passed each section, subsection, subdivision, paragraph, sentence, clause or phrase of this ordinance irrespective of the unconstitutionality or invalidity of any section, subsection, subdivision, paragraph, sentence, clause or phrase.

#### SECTION III. EFFECTIVE DATE

This Ordinance becomes effective thirty days after its final passage and adoption.

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Firs and finally vote:	t read at a regular meetin passed and adopted at a	ng of the Council of the City of Richmond held November 15, 2016, regular meeting thereof held December 6, 2016, by the following
	AYES:	Councilmembers Bates, Beckles, McLaughlin, Myrick, Pimplé, Vice Mayor Martinez, and Mayor Butt.
	NOES:	None.
	ABSTENTIONS:	None.
	ABSENT:	None.
		PAMELA CHRISTIAN CLERK OF THE CITY OF RICHMOND (SEAL)
Approved: TOM BUT Mayor		
	as to form: GOODMILLER ney	
	Contra Costa	: ss.
City of Ric I certify th Council of	at the foregoing is a true	copy of Ordinance No. 18-16 N.S., passed and adopted by the City a regular meeting held on December 6, 2016.